

We claim:

1. A medical product comprising:
a medical product including at least one integrated circuit that uniquely identifies the medical product by a unique identifier.

2. The medical product of claim 1, wherein the medical product is a surgical implement.

3. The surgical implement of claim 2, wherein the unique identifier is an alphanumeric string.

4. The surgical implement of claim 2, wherein the surgical implement is a sponge, a scalpel, a scissor, or a needle.

5. The surgical implement of claim 2, further comprising a memory that stores the unique identifier, and an analog front-end connected to the memory, wherein the analog front-end receives the unique identifier and transmits the unique identifier.

6. A method for monitoring and tracking surgical implements, the method comprising:

identifying at least one surgical implement including an integrated

chip, wherein each surgical implement is uniquely identified.

7. The method of claim 6, further comprising monitoring the location of the at least one surgical implement.

8. The method of claim 7, wherein monitoring further includes recording a time the at least one surgical implement is moved.

9. The method of claim 6, wherein identifying further comprises registering the at least one surgical implements.

10. The method of claim 6, wherein the identifying and monitoring are performed by a detector.

11. A method for monitoring and tracking medical products, the method comprising:

uniquely identifying at least one medical products by a unique identifier, each medical product including at least one integrated circuit having the unique identifier programmed therein; and
monitoring each medical product by its unique identifier.

12. The method of claim 11, further comprising locating the at least one medical product, by receiving the unique identifier from the integrated circuit.

13. The method of claim 11, further comprising outputting the unique identifier from the integrated circuit for the at least one medical product.
14. The method of claim 13, where the outputting comprises visually displaying or audibly reproducing the unique identifier with a sensor system receiving the unique identifier.
15. The method of claim 11, wherein the at least one medical product includes patient records, patient orders, laboratory studies, patient procedures or combination thereof.
16. A method for monitoring surgical implements in conjunction with a surgical procedure, the method comprising:
initializing at least one surgical implement wherein each surgical implement includes an integrated circuit;
registering the at least one surgical implement prior to a surgical procedure by programming a unique identifier in the integrated circuit; and
accounting for the at least one surgical implement at the completion of said surgical procedure by receiving the unique identifier from the at least one surgical instrument.
17. The method of claim 16, wherein the initializing occurs upon entering

an operating theater.

18. The method of claim 16, wherein the accounting for each of the surgical instruments occurs in the operating theater.

19. The method of claim 16, further comprising detecting any of the at least one surgical implements that is missing.

20. The method of claim 19, wherein each of the at least one surgical implements emits a signal containing the unique identifier.

21. The method of claim 16, further comprising:
indicating that at least one of the surgical implements is missing; and
locating the at least one missing surgical implements.

22. The method of claim 16, wherein the at least one surgical implement further includes a radio opaque material.

23. The method of claim 16, wherein the at least one surgical implements comprise a scalpel, sponge, needle, scissor, or combinations thereof.

24. A system for monitoring and tracking surgical implements comprising:
at least one surgical implement, each surgical implement including

an integrated circuit that stores a unique identifier of the at least one surgical instrument; and

a detector that detects the at least one surgical implement by detecting the unique identifier from the integrated circuit.

25. The system of claim 24, further comprising an output device that displays identifying data about each of the at least one surgical implements based on the unique identifier.

26. The system of claim 24, further comprising at least one auxiliary detector that detects the unique identifier from the integrated circuit.

27. The system of claim 24, wherein the at least one surgical implement comprise sponges, scalpels, needles, /scissors, or combinations thereof.

28. A system for monitoring and tracking surgical implements comprising:
at least one surgical implements, including at least one integrated circuit; and
a sensor for sensing the at least one surgical implements based on a signal received from the at least one integrated circuit.

29. The system of claim 28, further comprising an output device that displays identifying data about each of the at least one surgical implements

based on the signal received from the integrated circuit in the at least one surgical implement.

30. The system of claim 28, further comprising at least one auxiliary detector that detects the unique identifier from the integrated circuit.

31. The system of claim 28, wherein the surgical implements are sponges, scalpels, needles, scissors, laparoscopic or video assisted instruments or material, or combinations thereof.

32. A system for monitoring surgical implements used in conjunction with a surgical procedure comprising:

at least one surgical implement comprising an integrated circuit, the integrated circuit associating a unique identifier with each of said surgical implements and emitting a signal containing the unique identifier;

a detector that detects the signal emitted by said at least one surgical implement; and

an output device to process information provided by said detector.

33. The system of claim 32, wherein the output device displays a location of the at least one surgical implements based on the received signal.

34. The system of claim 32, wherein the output device is a computer.

PCT/US2012/046586

35. The system of claim 32, further comprising at least one auxiliary detector that detects the unique identifier from the integrated circuit.
36. The system of claim 32, further comprising software contained in the detector or output device including a relational database.
37. The system of 32, wherein the at least one surgical implement comprises scalpels, sponges, needles, scissors, laparoscopic or video assisted instruments or material, or combinations thereof.
38. A system for monitoring surgical implements used in conjunction with a surgical procedure comprising:
 - at least one surgical implement comprising an integrated circuit, the integrated circuit associating a unique identifier with each of said surgical implements and emitting a signal containing the unique identifier;
 - a platform with a detector that detects the signal and determines a placement and removal of each of said surgical implements from said platform based on the detected signal; and
 - an output device that receives and processes information provided by said detector.
39. The system of claim 38, wherein the platform with a detector means

is capable of detecting the time of placement and removal of the at least one surgical implements from said platform.

40. The system of claim 38, wherein the output device is a computer.
41. The system of claim 38, wherein the output device further comprises software including a relational database.
42. The system of claim 38, further comprising at least one auxiliary detector for detecting the location of each surgical implement.
43. The system of 38, wherein the at least one surgical implement comprises scalpels, sponges, needles, scissors, or combinations thereof.
44. A system for monitoring patients comprising:
 - at least one medical product, each medical product including a first integrated circuit;
 - at least one patient identification tag, each patient identification tag including a second integrated circuit; and
 - a sensor that monitors the medical products and patient identification tags based on signals received from the first and second integrated circuits.
45. The system of claim 44, further comprising an output device that

indicates a conflict between a proximity of the at least one medical product to the at least one patient identification tag.

Sub
a 2

46. The system of claim 44, wherein the output device indicates the conflict visually or audibly.

Sab 3
0988-01-062003

47. The system of claim 44, further comprising auxiliary sensors that sense the unique identifier from the integrated circuit.

48. The system of claim 44, wherein the sensor or the auxiliary sensors sense when a medical product and a patient identification tag are in conflict.

Saf
81

50. The medical label of claim 49, wherein the medical products are pharmaceutical containers.

51. The medical label of claim 49, wherein the pharmaceutical containers include boxes, crates, bottles, ampoules, bags, syringes, or combinations thereof.

52. The medical label of claim 49, wherein the integrated circuit contains medically or logically relevant data.

53. The medical label of claim 52, wherein the medically or logically relevant data includes, verification data, expiration date, unit number, antigens, antibodies, logistical information, delivery distribution, indications, contra-indications, interactions, or combinations thereof.

54. The medical label of claim 53, wherein the verification data verifies the authenticity of the medical product.

55. A blood product label comprising:

a label attached to a blood product, the label including at least one integrated circuit that uniquely identifies the blood product.

56. The blood product label of claim 55, wherein the label is temperature resistant.

57. The blood product label of claim 55, wherein the label is water resistant.

58. The blood product label of claim 55, wherein the label is shock

Sub A 4

resistant.

59. The blood product label of claim 55, wherein the label is flexible.

60. The blood product label of claim 55, wherein the at least one integrated circuit includes medically or logically relevant data.

Sub 5

61. The blood product label of claim 60, wherein the medically or logically relevant data includes, information about the blood donor, blood type, blood recipient, expiration date, unit number, antigens, antibodies, logistical information, delivery distribution, indications, contra-indications, interactions, or combinations thereof.

62. A blood product container including the blood product label of claim 55.

63. A medical product comprising:
at least one integrated circuit that uniquely identifies the medical product by a unique identifier.

Sub A 6

64. The medical product of claim 63, wherein the medical product is a box containing medical products, a crate containing medical products, a bottle, an ampoule, a bag, a syringe, or combinations thereof.

*Sub
A6*

65. The medical product of claim 63, wherein the medical product is a blood product.

*and
B27*

10527-0001-1664-0850